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| 09/804,121 | 03/13/2001 | Thomas P. Chu | | 8697 |

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EXAMINER

WILSON, ROBERT W

ART UNIT PAPER NUMBER

2661

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,121

Applicant(s)

CHU ET AL.

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1.0 The application of Chu et. al. entitled "METHOD OF ALLOCATING RESOURCES FOR NETWORK CAPACITY MANAGEMENT OF VOICE TRAFFIC IN A PACKET BASED BROADBAND ACCESS NETWORK" which was filed on 3/13/2001 was examined. Claims 1-18 are pending.

Claim Rejections - 35 USC § 112

2.0 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17 are rejected relative to 112/2nd paragraph because the metes and bounds of the claims cannot be assessed.

Referring to **Claim 1**, What is meant by "necessary information" & "optimal network"? How does one know when all of the necessary information is in the model unless one specifies what information is required by the model? An optimal network can only be determined relative to a specific criteria otherwise achieving an optimal network relative to no criteria in the claim is indefinite.

Referring to **Claim 2**, What is meant by "The network architecture of Claim 1"? Is the applicant claiming a method or a network architecture?

Referring to **Claim 5**, Is the applicant claiming a specification or a method? What is meant by a specification of information?

Referring to **Claim 6**, Claim 6 is a dependent claim to an independent method claim 1. Is the applicant claiming an algorithm or a method?

Referring to **Claim 7**, Claim 7 is dependent claim to an independent method claim 1. Is the applicant claiming an algorithm or a method?

Referring to **Claim 8**, Claim 8 is dependent claim to an independent method claim 1. Is the applicant claiming an algorithm or a method?

Referring to **Claim 9**, Claim 9 is dependent claim to an independent method claim 1. Is the applicant claiming an algorithm or a method?

Referring to **Claim 10**, Claim 10 is dependent claim to an independent method claim 1. Is the applicant claiming an output which is a signal or a method?

Referring to **Claim 11**, Claim 11 is dependent claim to an independent method claim 1. Is the applicant claiming an output which is a signal or a method?

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Referring to **Claim 12**, Claim 12 is dependent claim to an independent method claim 1.
Is the applicant claiming an output which is a signal or a method?

Referring to **Claim 13**, Claim 13 is dependent claim to an independent method claim 1.
Is the applicant claiming an output which is a signal or a method?

Referring to **Claim 14**, Claim 14 is dependent claim to an independent method claim 1.
Is the applicant claiming an output which is a signal or a method?

Claim Rejections - 35 USC § 101

3.0 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-14 are rejected relative to 101 because they lack utility.

Referring to **Claim 5**, “specification” is not a process, or machine, or item of manufacture, or a composition of matter; consequently, this claim lacks utility.

Referring to **Claims 6-9**, An “algorithm” is not a process, a machine, item of manufacture, or a composition of matter; consequently, this claim lacks utility. It should be noted that software instructions on a computer readable medium are an item of manufacture.

Referring to **Claims 10-14**, An “output” is a signal which is not a process, a machine, item of manufacture, or a composition of matter; consequently, this claim lacks utility.

Claim Objections

4.0 **Claim 2** is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2 is directed toward a network architecture or apparatus but refers back to a method independent claim.

Claim Objections

5.0 **Claims 1 –17** are objected to because of the following informalities:

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Referring to **Claim 1**, The usage of “decomposes” is confusing to the reader. The examiner suggests that the applicant clarify that the network architecture is being modeled by breaking the architecture into components.

Referring to **Claim 1**, The usage of “single level of call blocking” in claim 1 is confusing to the reader. The specification defines a single level segment tree on page 8 of the specification but does not define a single level of call blocking. Does the applicant mean that the value for call block is the same value for a level of voice switches in the tree? The applicant need to clarify what is meant by “single level of call blocking”

Referring to **Claim 2**, The usage of “subtending” in the claim is confusing to the reader. The applicant does not provide an equivalent meaning for “subtending” in the specification. The only reference to subtending is on page 17 of the specification. What is meant by “subtending”? Does the applicant mean that the nodes in a tree structure are connected to the voice switch or subtending? The applicant needs to clarify the definition of “subtending”.

Referring to **Claim 3**, What is meant by “embodiment of the method”? Is the applicant claiming the embodiment or the method?

Referring to **Claim 3**, The usage of “statistical multiplexing calculation” is confusing in the claim? The ATM switch performs “statistical multiplexing” and the path manager calculates the “traffic load for a virtual path segment”. The examiner suggest that the applicant delete “statistical multiplexing calculation” from the claim and replace with a “capacity traffic load calculation “.

Referring to **Claim 4**, This claim is confusing the reader. What is meant by “A method of assigning....”? The examiner suggests rewriting the claim to “ The method of Claim 3, wherein the block probabilities are assigned to the virtual path segment in so that the blocking probability is less than or equal to the blocking probability of its parent virtual path segment.

Referring to **Claim 5**, the claim is attempting to define what parameters need to be defined in the model so that capacity modeling calculation can be performed. The applicant defines these parameters in a indefinite and confusing manner. The examiner suggests that the applicant clarify what values of parameters are needed in the claim.

Referring to **Claim 6**, the claim is attempting to define what parameters need to be defined in the model so that capacity modeling calculation can be performed. The applicant defines these parameters in a indefinite and confusing manner. The examiner suggests that the applicant clarify what values of parameters are needed in the claim.

Appropriate correction is required.

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Claim Rejections - 35 USC § 103

6.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7.0 **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Langlois et. a. (U.S. Patent No.; 5,295,183).

Referring to **Claim 18**, Langlois teaches: A method of providing hierarchical call blocking feature in voice switches by maintaining in said voice switches information (12-14 are switching offices which inherently contain voice switches which are connected in a hierarch per Fig 1. Voice switches information is in 20 per Fig 1.) comprising:

Parent-child relationship of the aggregate segments (The applicant broadly claims "Parent-child relationship of the aggregate segments". The examiner has interpreted "Parent-child relationship of the aggregate segments" that the phones and switches are interconnected via trunks per Fig 1)

Resource allocated to aggregate segments (The applicant broadly claims "resources allocated to aggregate segments". The examiner interprets trunks between the phones and switches per Fig 1 as "resources allocated to aggregate segments")

Telephone number associated with each aggregate segment (The applicant broadly claims "telephone number associated with each aggregate segment" as "trunk group" per col. 3 line 36. It would have been obvious to one of ordinary skill in the art at the time of the invention that each trunk group has a number in order for the invention to work)

Wherein the decision for blocking individual calls is based on the above said information and the current traffic load of the aggregate segments (Fig 9 shows determination of blocking a single call based upon the congestion or current traffic load per 124 and 126 per Fig 9 or per col. 2 line 47-col. 7 line 41)

Langlois does not expressly call for: Telephone number associated with each aggregate segment but teaches "trunk group" per col. 3 line 36.

It would have been obvious to one of ordinary skill in the art at the time of the invention that each trunk group has a number which is utilized in order for the invention to work.

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Specification

8.0 The disclosure is objected to under 37 CFR 1.71, as being so being confusing. For example, the following items are not understood: The specification does not clearly define how key variables are defined in the method shown in Fig 11B. For examine in Fig 11B step 460 says to get C1 which equal to the required number of circuits for a parent segment. The specification does not clearly define how C1 is determined; consequently, one cannot determine the min of C1 and C per step 470 per Fig 11B. Lmax in Step 410 per Fig 11B is not defined in the specification; furthermore, the steps that follow do not define how Lmax is used. These are examples are not intended to define all examples of confusing items in the specification which need to be corrected.

Drawings

9.0 The examiner objects to the drawings in Figures 2& 5 because they are inconsistent with the specification.

Referring to Fig 2, the specification describes items 114 and 115 as VC and the drawing describes them as PVC which are they? “

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

A shortened statutory period for reply to this action is set to expire ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this letter.

Specification

10.0 The title of the invention is too long. A new title is required that is clearly indicative of the invention to which the claims are directed.

Conclusion

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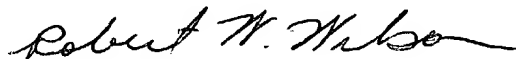
11.0 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Cox (US Patent No.: 6,449, 350 dated 09/10/2002) in which he discloses a process and system for performing capacity planning by collecting traffic on a 5ESS switch..
2. Davis et. al. (U.S. Patent No. ; 6,233,326 b1) in which he discloses a method and apparatus for creating blockage reports associated with a 5ESS switch.
3. Bossmeyer, et. al. (U.S. Patent No.: 6,285,61) in which he discloses a PSTN network to a Class 5 switch which is connected to a DATA ACCESS TANDEM or ATM Fabric switch via a IWU per Fig 4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


Robert W Wilson
Examiner
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RWW

July 30, 2004

A handwritten signature in cursive script, appearing to read "Douglas W. Olms".

DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600